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Conduct of Training

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1.0 PURPOSE

This document establishes Los Alamos National Laboratory (LANL or the Laboratory) training program management requirements that meet regulatory drivers and contractual requirements. The implementation of the processes defined in this document assures workers have the knowledge, skills, and abilities to perform their assigned duties efficiently, safely, securely, and compliantly.

Note: This document supports the implementation of, but does not duplicate, applicable regulatory and contractual requirements pertaining to training program management.

2.0 AUTHORITY AND APPLICABILITY

2.1 Authority

This document is issued under the authority of the Laboratory Director to direct the management and operation of the Laboratory, as delegated to the Associate Laboratory Director, Business Services as provided in the Prime Contract. This document derives from the Laboratory Governing Policies, particularly the section on Human Resources and from Department of Energy (DOE) Order (O) 151.1D, *Comprehensive Emergency Management System*, DOE O 414.1D, Adm. Chg. 1, *Quality Assurance*, DOE O 422.1, Adm. Chg. 2, *Conduct of Operations*, DOE O 426.2, Adm., Chg. 1, *Personnel Selection, Training, Qualification, and Certification Requirements for DOE Nuclear Facilities*, DOE O 470.4B, Chg. 2, *Safeguards and Security Program,* DOE handbooks, manuals, and guides and from applicable Code of Federal Regulations (CFR) requirements.

- Issuing Authority (IA): Associate Laboratory Director, Business Services
- Responsible Manager (RM): Service Innovations Division Leader
- Responsible Office (RO): Service Innovation Division-Institutional Training Services (ITS) Group

2.2 Applicability

This document applies to all workers managing, performing or conducting training activities, including contracted training services, conducted at the Laboratory. This includes all formal learning activities that provide job–required or job-related knowledge and skills.

Organizational-level training documents must be compliant with the provisions of this document. Where this document disagrees with organizational-level procedures, this document takes precedence until the differences are resolved.

The provisions of this document are not applicable to the following:

- External professional and/or continuing education programs required for obtaining and/or maintaining professional credentials or certifications required as a condition of employment.
- Training provided by Laboratory organizations to external non-Laboratory workers on behalf of other agencies.
- Sponsor-required programmatic training performed by Laboratory workers at the Laboratory. This training will follow the Conduct of Training Requirements except where the requirements of those external sponsors differ from those of the Conduct of Training Requirements. In these cases, the requirements of the sponsor will take precedence.

3.0 PROCEDURE DESCRIPTION

This document provides direction for the training, qualification, and certification of workers. Required implementing instructions for this document are in the following Tier III Functional Series Documents:

- ITS-FSD-001, *Conduct of Training Manual*,
- ITS-FSD-003, *Training Management Manual*, and
- ITS-FSD-002, *UTrain Manual*.

The DOE orders referenced in this document are found on the DOE Directives, Delegations, and Requirements webpage. The DOE manuals, standards, and handbooks are found on the DOE Office of Environment, Health, Safety, and Security webpage. The CFRs are found on the Government Printing Office webpage.

Laboratory policy and procedures referenced in this document are found on the Policy Office webpage and the Forms listed are located on the Forms Center webpage.

The templates, checklists, and other tools referenced in this document are on the Conduct of Training Manual Tools webpage.

Note: As of this this revision, conditional authorizations are no longer allowed.

3.1 Training Administration

3.1.1 Position Training Level Determination

The level of Laboratory-wide, facility- and job-specific training, and qualification and/or certification required for each Laboratory position must be determined and documented commensurate with a worker's assigned duties and tasks.

Training, qualification, and certification for workers conducting nonnuclear and radiological activities must conform to the requirements of DOE O 151.1D, *Comprehensive Emergency Management System*, DOE O 414.1D, Adm. Chg. 1, *Quality Assurance*, DOE O 422.1, Adm. Chg. 2, *Conduct of Operations*, DOE O 470.4B, Chg. 2, *Safeguards and Security Program*, and the American Society of Mechanical Engineers, (ASME) Nuclear Quality Assurance NQA-1-2008 and NQA-1-2009, *Quality Assurance Requirements for Nuclear Facility Applications,* as applicable to the position. Additional requirements may be stipulated by applicable regulatory drivers and contractual requirements.

Training, qualification, and certification for workers conducting nuclear work must meet the requirements listed above and those of DOE O 426.2, Adm., Chg. 1, *Personnel Selection, Training, Qualification, and Certification Requirements for DOE Nuclear Facilities* and NQA-1-2008 and NQA-1A-2009, *Quality Assurance Requirements for Nuclear Facility Applications,* as applicable to the position.

Positions that include activities or tasks that are difficult to perform, that have a high consequence for inadequate performance, that are infrequently performed, or that require moderate- or high-hazard integrated work documents, may require additional qualification or certification by the

responsible line manager. These qualifications/certifications may be required at the position/job, activity, or task level.

Figure 1, *Position Level Determination Flowchart*, provides a flowchart to assist with determining the training level.

3.1.1.a Level 1 Determination: Training Only

Level 1 Determination applies to those positions with tasks having a low probability of adverse consequences resulting from performance failure. Generally, the entry-level knowledge, skills, and abilities of workers in these positions are sufficient to satisfy the position requirements and no additional management action is required to qualify the workers. Workers at this level complete Laboratory-wide, facility- or building-specific, and organizational training requirements. A formal qualification standard is not required. However, if an organization uses a training identification and assignment checklist or training questionnaire, documentation of training assignment is strongly recommended.

3.1.1.b Level 2 Determination: Training, Qualification or Certification for Nonnuclear and Radiological Facility Work Activities

Training and qualification are required if the risks associated with task or job performance failure are “moderate or high” and/or if the entry-level knowledge, skills, and abilities of new hires are insufficient to allow for competent performance. Training for a Level 2 Determination must address applicable risks and hazards, topics related to facility safety, and job/activity/task-specific training designed to provide the knowledge and skills required to perform assigned duties and tasks. For work performed under an integrated work document, when external or internal LANL requirements drive qualification or certification, or best-management practices indicate the need for formal training and qualification, a qualification standard is required. A Level 2 Determination is required for all work performed under moderate-hazard integrated work documents or equivalent detailed procedures in nonnuclear facilities. See the Qualification Standard template.

3.1.1.c Level 3 Determination: Qualification for Nuclear Facility Work Activities

Work performed within or in support of nuclear facilities may require formal qualification.

DOE O 426.2, Adm., Chg. 1, requires qualification for the following position categories:

- managers,
- technical staff,
- technicians,
- maintenance workers,
- operators,
- supervisors,
- instructional analysts/developers, and
- training and instructors.

Note: Correct determination of a position category requires a crosswalk of a worker’s day-to-day job activities against the position category definitions in DOE O 426.2, Adm., Chg. 1, Attachment 2.

DOE O 426.2, Adm., Chg. 1, specifies requirements for entry-level education and experience, training-program contents, examinations, qualification, requalification, and record keeping for qualification in nuclear facilities. Section 3.3.7 of this document provides detailed guidance for nuclear facility qualification.

A listing of regulatory required qualification, certification, and/or licensure is located in the *Conduct of Training Manual*.

3.1.1.d Level 4 Determination: Certification for Nuclear Facility Work Activities

Certification (of qualification) is required for positions in which inadequate performance on assigned tasks and activities can result in unacceptable consequences. In addition to positions that must be certified as stipulated by regulatory drivers and contractual requirements, certification may be required for other positions based on the outcome of job and task analyses. Variables that must be considered in determining if a position requires certification include task/activity complexity, difficulty, frequency of performance of the task/activity, and potential adverse consequences.

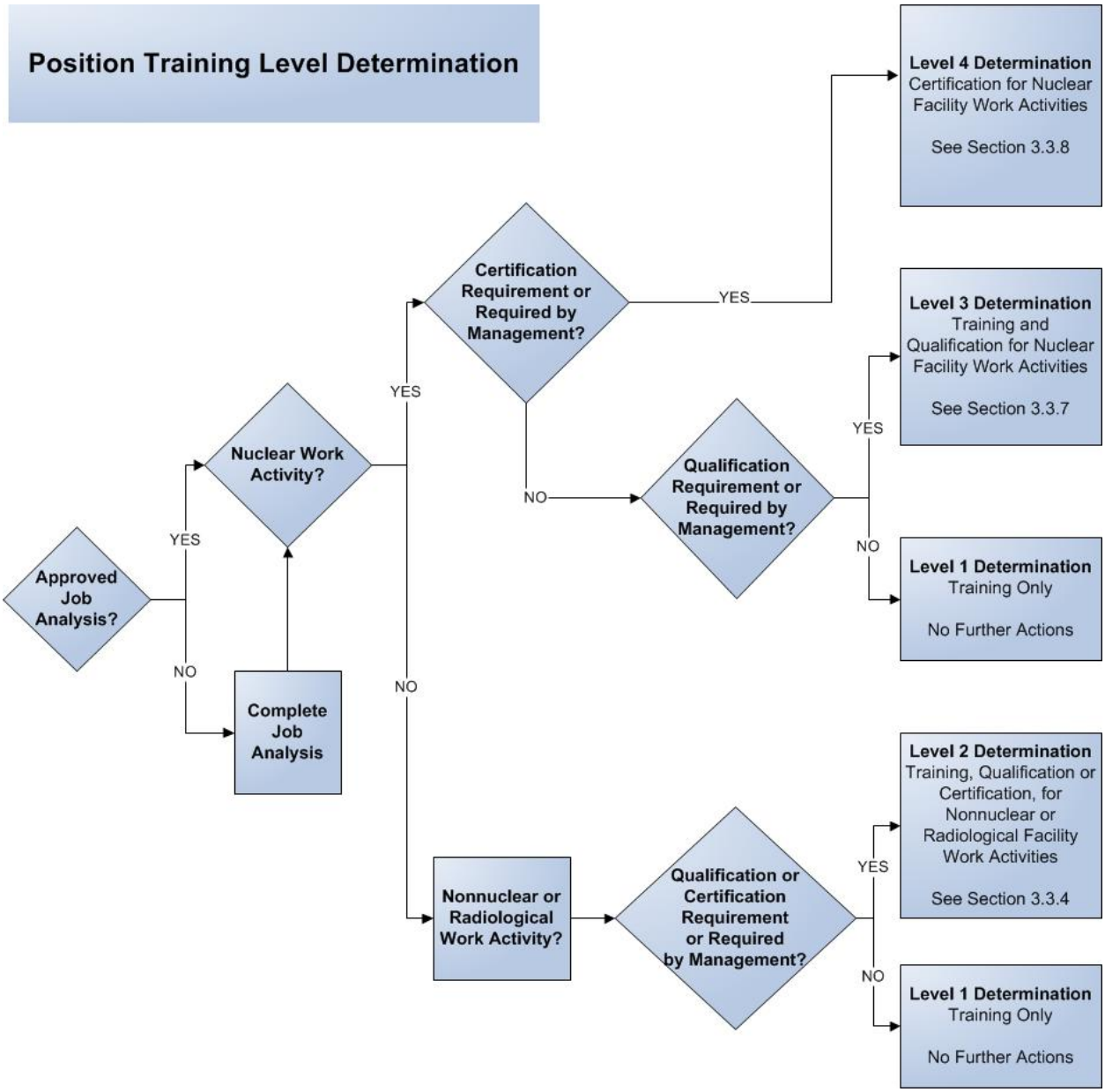

Fig. 1. Position Training Level Determination Flowchart

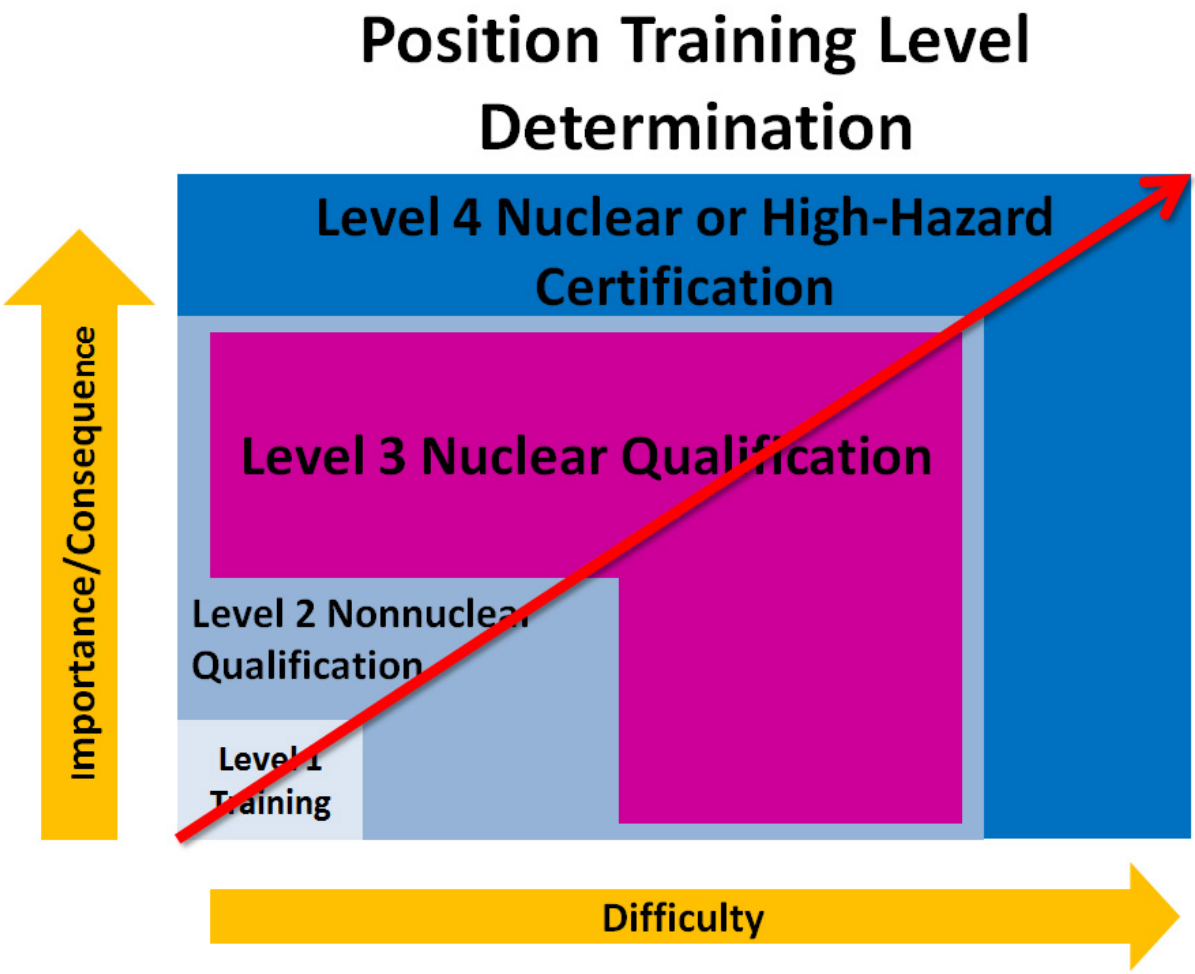

Fig. 2. Position Training Level Determination Schematic

3.1.2 Training Program Plans

At a minimum, each Directorate and all Programs/Offices that are independent of Directorate affiliation, must develop, implement, and maintain a Training Program Plan. These plans define and document the manner in which organizations implement Conduct of Training requirements. Training program plans at lower organizational levels may be required by regulatory drivers, contractual requirements, and/or responsible Associate Directors.

While each Training Program Plan addresses the detailed training implementation requirements unique to the specific Directorate, program, or office, it must include the following:

- any specific requirements that are more restrictive than the requirements established in the Laboratory's training policies and procedures,
- any Laboratory training policy and procedure requirement(s) that do not apply or for which the program has received a waiver, and
- justification(s) for each requirement from which a waiver has been allowed.

Training Program Plans must be developed using the Training Program Plan template unless format/content is prescribed by a regulatory driver or contractual requirement (e.g., DOE O 151.1D, *Comprehensive Emergency Management System*). Organizations should secure the assistance of the Institutional Training Services group or the Nuclear and High Hazard Training group in developing Training Program Plans. Additional information is embedded in the Training Program Plan template.

Note: Radiological and other nonnuclear facilities and organizations do not need to meet the Requirements of DOE O 426.2, Adm., Chg. 1.

All Training Program Plans require concurrence of the Institutional Training Services Group Leader. Training Program Plans must be approved by the responsible line managers for the organizations to which they apply. Training Program Plans must be reviewed and revised as necessary on at least a triennial basis to assure they accurately reflect the owning organization's training program. Interim review and revision may be required as necessary to address modifications to the organization's training program resulting from changes to the safety basis, addition of new programs, or operating experience.

3.1.3 Security Classification Review of Training Materials

The DOE has declared some subject areas to be devoid of classification and sensitive information areas. The Laboratory Classification Officer has defined and approved Designated Unclassified Subject Areas (DUSAs). Training is included as a DUSA (Designator: TRNG).

The DUSA for training includes:

- requirements,
- training course material,
- procedures designed to ensure worker safety during routine operations involving unclassified substances and processes, and
- activities and facilities that do not require review by a derivative classifier or unclassified controlled nuclear information reviewing official.

When these reviews are not required, the document author must reference the DUSA exception.

Note 1: Before citing a DUSA, authors are strongly encouraged to work with derivative classifiers in their organizations and/or Classification Group staff to identify specific exclusions potentially applicable within their specific program/project areas.

Note 2: Documents that may contain unclassified controlled nuclear information must be reviewed by an unclassified controlled nuclear information reviewing official.

For specific guidance, the author should contact a derivative classifier or an unclassified controlled nuclear information reviewing official.

3.1.4 Training Substitutions

Workers in nonnuclear facilities, who have received formal documented training that is equivalent to a Laboratory training course, may request a substitution for the Laboratory course. Nonnuclear workers complete Form 2154, *Request a Training Equivalency (nonnuclear)* and submit the form to their supervisor/manager for concurrence. If the supervisor/manager concurs, the supervisor/manager submits the completed form to the training course/program owner. If the specific course requirements are met, the training course/program owner may grant the

substitution. Contact the Training Help Desk (7-1111, training@lanl.gov) for assistance in determining training course/program owners.

Workers in nuclear facilities must use P781-3, *Exceptions to Training, Education, and/or Experience Requirements for Nuclear Facility Workers*, to request course equivalencies.

Note: Course equivalencies are not allowed and credit will not be granted for continuing or certification-related training.

3.2 General Training Requirements

3.2.1 Laboratory-wide Training

The ITS Group Leader determines if the proposed training meets the requirements for Laboratory-wide training.

New Laboratory-wide training requirements or revisions to existing Laboratory-wide training requirements that result in a substantive change to training content, requirements and/or the target audience must be reviewed and validated by the Service Innovation-Institutional Service Group Leader and approved by the Service Innovation Division Leader before the training is implemented. Functional program owners may appeal disapproval of requests for new or revised Laboratory-wide training to the Associate Laboratory Director, Business Services.

These protocols and the process described below, apply to the following:

- all training for which the target audience includes individuals from more than one directorate or for which the training program owner is requiring training of individuals outside their directorate, and
- "substantive changes" including all new Laboratory-wide training requirements that require a new Laboratory-wide training, a significant increase in training content/duration, the addition of new requirements in an existing Laboratory-wide training such as an examination, or a new requirement for refresher training.

Note 1: Revision to maintain the currency of a Laboratory-wide training does not constitute a substantive change.

Note 2: If the Laboratory-wide training applies to a small target audience (generally less than twenty workers), functional program owners may submit a written request to the Service Innovation Division Leader through the ITS Group Leader for an exception to these requirements.

Note 3: Inclusion of a Laboratory-wide training requirement in a new or revised Laboratory requirements document (e.g., procedure or manual) does not constitute approval of the training. If any new or revised training requirements are proposed in a Laboratory requirements document, the document author(s) must obtain approval for new or revised Laboratory training before the documents are submitted to the Policy Office for processing. New or changed training requirements may need to be reviewed by the Institutional Management Review Board (IMRB). See P311-1, *Creating, Revising, and Cancelling Institutional Documents*.

Procedural steps for requesting review and approval for new or revised Laboratory-wide training are as follows:

- The requester must consult with the ITS Group Leader to determine if the requirement(s) is/are identified in the Institutional Training Requirements Matrix (see the *Conduct of Training Manual)*.
- If the requirement(s) is/are not identified, the requester must coordinate with ITS to conduct a Training Requirement Analysis using Form 2254, *FY 2019 Training Requirements Analysis Record for Laboratory-wide Training Course*.
- ITS reviews and validates the Training Requirement Analysis for cost, delivery method, and audience, and to ensure requirements for the training are included in the Prime Contract. If there is no Laboratory-wide impact, the ITS Group Leader notifies the functional program owner and no further training action is required. If there is Laboratory-wide impact, the ITS Group Leader forwards the completed and validated Training Requirement Analysis to the IMRB for approval.

3.2.2 General Employee Training

General Employee Training (GET) provides an overview of environment, safety, health, and other information applicable to all new workers. GET is required for all new Laboratory workers who will be at the Laboratory for 10 or more workdays during any consecutive 12-month period and must be completed within their first 10 days after arrival at the Laboratory. Workers may, at their discretion, be excused from the GET classroom course upon successful completion of the open-book GET examination. Workers requiring unescorted access to nuclear facilities must successfully complete the GET examination.

Changes in GET topics must be communicated to the Laboratory population. Changes may be addressed Laboratory-wide through:

- all employee notices,
- targeted employee notifications,
- security smarts,
- Emergency Procedures and Protective Actions refresher training,
- the Annual Security Refresher briefing, and/or
- other refresher/continuing training.

Facility-specific aspects of GET may be addressed as part of facility-specific access training and/or as part of the qualification/certification continuing training program.

3.2.3 Building Emergency Plans/Facility-Specific Access Training

Building and/or facility-specific emergency plan training is conducted at the Laboratory through a comprehensive, coordinated, and documented program that is an integral part of the Emergency Management program at the Laboratory.

Facility-specific access training must be implemented commensurate with the hazards associated with the facility and activities therein. Facility-specific access training must address all emergency actions and procedures applicable to the facility. Building emergency plans for buildings within a facility may be incorporated into the facility-specific access training. If building emergency plans are separate from the facility-specific access training, they must not contain redundant information.

This training must have content specific to the building or facility it covers. It should not repeat any of the generic emergency actions training contained in the emergency preparedness module of GET.

Additional information on Building Emergency Plan Training and Facility-Specific Access Training is found in the *Conduct of Training Manual*.

3.3 Qualification and Certification at the Laboratory

3.3.1 Qualification

Qualification is a formal program that delineates the required education, experience, training, skills, examination(s), and any special requirement(s) necessary to ensure that workers can perform assigned duties in a safe and reliable manner.

Qualification programs consist of entry-level requirements (e.g., experience and education), non-training requirements as applicable (e.g., medical examination requirements), initial training requirements, continuing training requirements, and requalification requirements. These requirements are documented in qualification standards.

Responsible line managers or designees, supported by deployed training professionals, define, if any, the qualification requirements for each position in the organization. All training leading to qualification must be based on a systematic approach method and incorporate a graded approach to establish the appropriate level of rigor. All qualifications must be documented and recorded in UTrain.

As deemed appropriate due to the difficulty, importance, frequency, and/or hazards/risks of the work, responsible line managers have the authority to require qualification of assigned workers even if not required by regulatory drivers or contractual requirements.

3.3.1.a Position, System, Task, or Activity Qualification or Certification

Qualification or certification may be accomplished at the **position**, **system**, **task**, or **activity** level. The responsible organization must document qualification requirements in a qualification standard.

Position qualifications are based on a core set of tasks that are common to all workers assigned to the position. The qualification process includes, as applicable, the following:

- established entry-level education/experience prerequisites and non-training requirements as applicable,
- completion of prerequisite training, e.g., Laboratory-wide and facility-specific training requirements,
- position-specific initial/core training,
- On-the-Job Training (OJT),
- written examination, if required,
- performance evaluations,
- oral board, if required,
- qualification documentation,

- continuing training, and
- requalification.

Position-specific qualifications and certifications of qualifications must be recorded in UTrain.

Note: Licensing of workers (e.g., hazardous material transporters, forklift drivers) is a form of documenting qualification. Responsible line managers may, at their discretion issue, licenses for lower level/subordinate Department of Transportation and other requirements. As such, the process for licensing workers must meet the same requirements for qualification. Responsible line managers that require a license for a specific position are required to issue that license only after verifying that the qualification is current in UTrain. Licenses must meet configuration management requirements to stay consistent with UTrain and the qualification-specified licensure period. Licenses issued must conform to the physical requirements for badges and credentials and contain sufficient information to identify the type and level of qualification, authorization to operate specific equipment, authorizing official, and an expiration date for the license, which matches the qualification requirements.

System qualifications are based on the specific knowledge and skills to be qualified to perform assigned duties on a safety-significant system.

Activity qualifications are the training requirements to perform activities and tasks. The activity-specific training must correspond with the training prerequisites for the activity in the integrated work document, in accordance with P300, *Integrated Work Management*.

Task qualifications are the training requirements to perform specific tasks. This enables new workers to be trained and qualified to perform limited work tasks before they complete the full activity or position-level qualifications. An example would be to qualify workers to perform unclassified tasks that do not require a clearance before receiving a clearance.

3.3.2 Certification

Certification of qualification is the process by which Laboratory managers provide written endorsement of the workers' satisfactory achievement of qualification for a position. Certification also validates the adequacy of the qualification program and the workers' attainment of the required knowledge, skills, and abilities. Certification, in addition to qualification, may be required if there is a possibility of the following:

- off-site consequences (i.e., release of hazardous substances to the environment),
- serious injury or death to collocated workers,
- serious damage to the facility, or
- serious damage to the environment.

Responsible line managers have the authority to require certification, even when not stipulated by DOE orders or other regulations, based on the difficulty, importance, frequency, and hazards/risks of work performance.

Certification follows the completion of the qualification program for positions identified as requiring certification. Certification must not be granted until all training and qualification requirements have been satisfactorily met. All certifications must be documented and recorded in UTrain.

Satisfactory completion of qualifications that result in certification must be verified by a person other than the candidate's immediate supervisor (e.g. a skip-level manager). In some cases, the certifying entity may be in another organization.

Certification requires higher levels of rigor in the requirements associated with continuing training, examination, and reexamination for recertification than are required for qualification.

In addition to the requirements for qualification, certification of qualification includes, as applicable, the following:

- evaluations
    - written
    - performance evaluations,
    - operational evaluation, if required for the position, and
    - oral board, if required for the position,
- proficiency requirements
- certification documentation,
- continuing training,
- independent verification of qualifications for certification,
- approval of extension of qualification, and
- recertification.

3.3.3 Qualification Standards

Qualification standards are required for positions having qualification and certification requirements and are developed for specific positions or job functions, system, activity, or task qualifications. Qualification standards provide a roadmap of the training, qualification, and, where required, certification requirements necessary to provide workers with the knowledge and skills they need to perform their tasks and activities safely and effectively.

The objectives of qualification standards are as follows:

- to provide clear guidance on the training requirements for each qualified/certified position,
- to document and make available the position-related training information for use by workers, supervisors, management, and internal/external assessment teams, and
- to confirm that the program is structured and documented to facilitate any reviews and analyses of its effectiveness.

Each organization, with assistance from designated subject matter experts, expert performers, and/or training professionals, must develop qualification standards for the qualified/certified positions in the organization. The responsible organization must identify any special physical characteristics that may require a physical examination by using Form 1793, *Job-Demands Evaluation*.

Workers must use the qualification standard template to document all qualification standard development. Instructions for developing qualification standards are embedded in the template.

The training program owner has the authority to cancel a qualification standard developed and managed under his/her jurisdiction. This is accomplished by writing a qualification standard cancellation memorandum to the file and informing all parties affected by the cancellation stating the reasons for the cancellation and any changes or compensatory measures that need to be taken, if any, after the cancellation. The qualification standard cancellation memorandum is filed with a hard copy of the cancelled qualification standard with the cancelled or superseded box checked, in the qualification standard history file as a record of the cancellation. Copies of the cancellation memorandum are also distributed to affected workers.

Note: A qualification standard must not be cancelled unless there is a clear and compelling reason to do so, such as the position has been eliminated because the work is no longer being done; the duties of the position have been assumed by another position and absorbed by another qualification standard; or the regulatory requirements, job requirements, or integrated work documents requirements have been reduced to the level that the qualification is no longer needed. The justification for the cancellation must be clearly articulated in the qualification standard cancellation memorandum.

3.3.4 General Qualification Requirements

General qualification requirements for nonnuclear, radiological, moderate- or high-hazard workers are defined in the *Conduct of Training Manual*.

3.3.5 Mentoring for Qualification

Mentoring normally occurs with a Principal Investigator mentoring an undergraduate student, graduate research assistant, post-doctoral appointee, or new worker in the knowledge and skills necessary to gain competency and proficiency in a specific field of study or experimentation.

The qualification by mentoring process must be disciplined, systematic, and structured to withstand the scrutiny of internal and external assessments of the qualification program and, more importantly, to ensure that mentored workers perform their work safely and competently.

All qualifications by mentoring must be documented and recorded in UTrain. This must be accomplished by establishing a hierarchy of classes or modules and including them in a curriculum. Documentation of qualification by mentoring must meet the same standard as all other training documentation at the Laboratory and is completed in accordance with Section 3.5.

Additional information on mentoring is found in P507, *Student Programs*, P508, *Postdoctoral Program*, and SD601, *Conduct of Research and Development*.

3.3.6 Subcontractor Qualification Requirements

The Department of Energy requires that subcontractor workers who work in or support Laboratory facilities meet the qualification requirements for the job function they will be performing. Subcontract workers must meet the same qualification requirements as a TRIAD National Security, LLC employee would if performing the same work. The operating organization must ensure that subcontractor workers who perform work in or support Laboratory facilities are qualified to perform their assigned tasks.

For subcontractor workers in Laboratory facilities who do not meet the requirements, work activities must be supervised by a person who is fully qualified for the work activities.

To ensure the subcontractor meets Laboratory facility training, qualification, and/or certification requirements, the requesting organization must:

- define the qualification requirements for every subcontract worker performing work activities at Laboratory nuclear facilities,
- communicate the qualification requirements to the subcontracting company through exhibits C and or D as appropriate,
- require specific documented evidence from the subcontractor proving that the qualification requirements are met,
- track the qualification requirements for the duration of the project to ensure that they continue to be met, and
- ensure subcontract workers performing work under a Laboratory integrated work document have the training required for authorization to perform that integrated work document recorded in UTrain.

These requirements are met by following the requirements of P850, *Subcontract Technical Representative Procedure*, and P101-12, *ES&H Requirements for Subcontractors*.

Additionally, all subcontracts for workers with specific qualifications or for training must be reviewed and approved prior to the issuance of the Request For Proposal or contract by the ITS Group Leader or delegate in accordance with the current revision of the Acquisition Services Management Document 3041.00.0410, *Goods or Services Requiring Special Review/Approval.*

3.3.7 Nuclear Facility Qualification Requirements

Nuclear facility qualification requirements are defined in DOE O 426.2, Adm., Chg. 1, *Personnel Selection, Training, Qualification, and Certification Requirements for DOE Nuclear Facilities*. Managers and workers implementing nuclear facility qualifications must follow the requirements listed in DOE O 426.2, Adm., Chg. 1, for the position categories listed and as identified in the facility's Training Implementation Matrix.

Qualification must not be granted until all requirements (including written and operational evaluations) and other requirements specified in the qualification standard have been satisfactorily completed. All qualifications must be documented and recorded in UTrain.

These requirements are met by following the requirements of P850, *Subcontract Technical Representative Procedure*, and P101-12, *ES&H Requirements for Subcontractors*.

3.3.8 Nuclear Facility Certification Requirements

Nuclear facility certification requirements are found in DOE O 426.2, Adm., Chg. 1, *Personnel Selection, Training, Qualification, and Certification Requirements for DOE Nuclear Facilities*. Managers and workers implementing nuclear facility certification must follow the requirements listed in DOE O 426.2, Adm., Chg. 1, for the position categories listed and as identified in the facility's Training Implementation Matrix.

Certification must not be granted until all qualification requirements (including written and oral examinations and operational evaluations) and other specified requirements (e.g., medical examination) have been satisfactorily completed, and management has assured that the person is capable of safely performing all functions of the position. All certifications must be documented and recorded in UTrain. Satisfactory completion of qualifications that result in certification must be verified by signature by a person or group other than the candidate's immediate supervisor or the person/group that provided the training.

3.4 Systematic Approach to Training

The systematic approach to training is a five-step process for the generation, conduct, and assessment of effective training. The five steps in the process are analysis, design, development, implementation, and evaluation.

DOE Handbook (HDBK) 1078-94, *Training Program Handbook: A Systematic Approach to Training*, and DOE HDBK 1074-95, *Alternative Systematic Approaches to Training* provide detailed information on the systematic approach. All workers performing training functions at the Laboratory must be qualified in the application of the systematic approach through the Training Staff Qualification Program or have approved equivalent training.

As training is developed, training professionals and course developers must document and track the use of the systematic approach processes using the Systematic Approach to Training Checklist. To maintain systematic approach documentation, each training course must have a file or electronic directory that contains the following sections:

- analysis,
- design,
- development,
- implementation,
- evaluation, and
- instructor qualifications.

This documentation provides evidence that a systematic approach process was followed.

3.4.1 Analysis

The analysis stage identifies training requirements for a specific job position or function and ascertains that training programs are oriented specifically to the actual tasks performed by the worker doing the job. Training requirements are determined by analyzing the needs, the job or function, and the tasks. Training program goals are established and the scope of training content is defined from analysis results.

Training analysis may consist of needs analysis, training requirements analysis, job analysis, and task analysis:

- Needs analysis is a systematic process for identifying potential or existing training needs by examining and researching regulatory, contractual, or Laboratory policy and procedure requirements and differences between desired performance and existing or expected performance.
- Training requirements analysis is a systematic process for identifying training required by law, regulations, contractual requirements, or Laboratory policy and procedures.
- Job analysis determines specific tasks associated with the performance of a job and determines which tasks are critical to the competent performance of the job function and other tasks associated with the job function. Job analysis must involve knowledgeable workers, subject matter experts and expert performers, who are aware of the requirements of the job function and standards of performance required to properly perform the job.
- Task analysis involves breaking down each individual task into its components to determine the knowledge and skills required to perform the task.

Additional analysis information can be found in the *Conduct of Training Manual*.

3.4.2 Design

The design phase begins by considering the tasks selected for training in the analysis phase. For each of the selected tasks, learning objectives are produced detailing the essential knowledge and/or skills that must be addressed by the training. Valid learning objectives provide the foundation for subsequent training development or training procurement decisions. Training specialists use the Systematic Approach to Training Checklist to document the entry-level requirements, learning objectives, and evaluation criteria.

Additional design information can be found in the *Conduct of Training Manual*.

3.4.3 Development

The development phase translates design decisions into training materials. Using the objectives, instructional approach, and media selections from the design phase, the development phase produces course materials for the instructor, course materials for the worker, and evaluation instruments.

In the development phase, the training specialist, instructional technologist, and subject matter expert work together to achieve the following:

- develop learning content to support the learning objectives written in the design phase,
- develop training activities that help workers master the learning objectives and reinforce job performance,
- identify lessons learned and case studies to illustrate the relevance of the learning objectives to the worker's work environment,
- develop training and job aids that facilitate the transfer from the learning environment to the work environment,
- develop examination and/or evaluation materials to assess the workers' mastery of the objectives, as applicable,
- pilot the course, and
- revise the lesson plan and/or course materials based on the pilot findings.

All classroom lesson plans must include the building or facility emergency plan applicable to the training setting and OJT must address emergency actions. Instructors must familiarize themselves with the applicable emergency plan and remind workers of emergency procedures and emergency exits before beginning training. OJT conducted in the work setting must follow the safety and security requirements of the training activity in accordance with any applicable integrated work document.

Additional development information can be found in the *Conduct of Training Manual.*

3.4.4 Implementation

Instructors must prepare sufficiently to provide consistent and effective delivery of lessons. They must also review lesson plans to maintain familiarity with lesson content, equipment, and tools.

The person responsible for the course must identify and schedule a location appropriate for the number of scheduled workers, learning activities, equipment, and media to be used.

Whenever possible, course schedules must be available through UTrain at least two weeks before the first offering to allow prospective attendees to adjust their schedules so that they may attend the offered course. If operational schedules require shorter posting times, this can be done with training program owner concurrence. Schedule changes in UTrain must be posted at least five working days before the subsequent offerings. Workers scheduled for training must be notified of changes to the training schedule at least 24 hours in advance of the class.

Training grace periods may be allowed for certain courses; workers may contact a training point of contact for additional information.

Additional implementation information can be found in the *Conduct of Training Manual*.

3.4.5 Training Evaluation

Training evaluation is a systematic appraisal of the effectiveness of training materials, training process, and instructor and worker performance to meet the training program's goals and objectives in support of the organization's operations and mission. Individual concerns with job performance may be addressed with selective performance-based evaluations.

3.4.5.a Level I—Evaluating Reaction

Level I evaluation measures worker perceptions of a training program, for example including questions such as, "Was the material relevant to their work?", "Was the information useful to them?", and "How could the training be improved?"

Level I evaluations apply to all formal training conducted at the Laboratory and must be administered for scheduled classroom training sessions. Responsible line managers or designees responsible for training ensure that sufficient Level I evaluations are conducted to determine worker reactions to the training.

All instructors conducting instructor-led training, including on-the-job training, at the Laboratory must conduct end-of-course evaluations. Evaluation results are used to identify course and instructor improvement opportunities.

3.4.5.b Level II—Evaluating Learning

The purpose of evaluating learning is to determine and document a worker's acquisition of the knowledge and/or skills presented in the training.

At the Laboratory, the word examination is the umbrella term that covers tests, quizzes, and performance demonstrations. A test is a validated evaluation, written, oral, or performance-based method that measures a worker's mastery of the learning objectives and skills presented by training. A quiz is used to measure a worker's comprehension of training learning objectives. Tests must be proctored. Quizzes may or may not be, depending on the worker's ability to gain administrative-level access to the yellow network.

3.4.5.c Level III—Evaluating Performance

Level III evaluation attempts to answer the question "Are the newly acquired skills, knowledge, or abilities being applied in the work environment?"

The Service Innovation Institutional Training Services group performs Level III evaluations for specific Laboratory training programs when requested by senior management. Organizational concerns with job performance are addressed with selective performance-based evaluations. These evaluations are used to measure the actual on-the-job performance against the approved

performance evaluation criteria (task, conditions, performance standards) as they appear in the performance demonstration and/or the validated and approved operating procedure.

3.4.5.d Level IV—Training Program Evaluation

A training program evaluation is the last step in the evaluation phase in a systematic approach to training and is the quality assurance component of a performance-based training program. It includes internal and/or external evaluations and recommendations to revise the training programs, based upon an analysis of the deficiencies identified in these evaluations.

The Service Innovation Institutional Training Services group conducts independent internal training and qualification program assessments for the Laboratory's nuclear and nonnuclear training programs. These assessments are conducted in accordance with PD328, *LANL Assessment Program*, P328-2, *Independent Assessment*, and, as applicable, DOE-STD-1070-94, *Guidelines for Evaluation of Nuclear Facility Training Programs*.

Nuclear training and qualification programs are performed triennially in accordance with DOE O 426.2, Adm., Chg. 1, *Personnel Selection, Training, Qualification, and Certification Requirements for DOE Nuclear Facilities,* and DOE-STD-1070-94. The Institutional Training Services and Nuclear and High-Hazard Operations management reserve the right to reschedule assessments to coincide with other assessments or to lessen the impact to operational schedules.

Training and qualification program assessments conducted by the Service Innovation Institutional Training Services group assess the following:

- the status of the organization's training findings in all assessments over the previous four years to identify closure status, closure effectiveness, and program sustainability, and
- the status of the development and maintenance of qualification standards and the full implementation of those qualification standards through a two-year cycle of initial and continuing training.

Nonnuclear training and qualification programs are assessed against criteria reference and approach documents that apply to the program being assessed. These include but are not limited to:

- P781-1, *Conduct of Training,*
- *Conduct of Training Manual,*
- DOE O 414.1D, Adm. Chg. 1, *Quality Assurance*,
- applicable contractual drivers, and
- applicable consensus standards.

Additional evaluation information can be found in the *Conduct of Training Manual.*

3.5 Training Staff Qualification Program

All Laboratory workers developing, implementing, and administering training must be qualified at a level commensurate with their assigned training responsibilities. The qualification requirements for these workers are included in the respective Training Staff Qualification standards:

- Instructor,
- Instructional Technologist,

- Training Coordinator,
- Training Manager, and
- Training Specialist.

Additional Training Staff Qualification Program information is defined in the *Conduct of Training Manual*. All training and qualification requirements are administered through UTrain curricula.

3.6 Data Management Systems and Training Records

Training records must be created, maintained, and dispositioned in accordance with management policies and procedures and records management best practices. Training coordinators and/or training administrators must receive all training-related records and process them as detailed in this section.

The Software and Applications Engineering Division maintains the Laboratory databases and tools such as UTrain, and successor systems as appropriate. These electronic tools are the official Laboratory basis for determining worker authorization and qualification to perform assigned tasks, and must be used by all organizations at the Laboratory.

3.6.1 UTrain

UTrain is the Laboratory system of record for documenting worker training, qualification, certification, and authorization. Training that provides job-required knowledge and skills, including awareness level training that provides job-related knowledge, must be recorded in UTrain including the following:

- Laboratory-wide training,
- facility-specific training, including all building emergency plan training,
- job-, activity-, and task-specific training,
- specialty training, and
- off-site training.

The *UTrain Manual* provides specific information on the use of UTrain.

3.6.2 Training Records

Training program owners in all organizations, through training coordinators and/or training administrators, must organize and maintain both electronic and original approved training program records for easy retrieval, assessment, and configuration management. Standardized and consistent electronic folder/directory structures must be aligned with and support the systematic approach to training phases of analysis, design, development, implementation, and evaluation, as well as a folder/directory for administrative files.

Note: Individual training records may contain sensitive information and must be protected in secured locations. In such cases, the Training Implementation Matrix or Training Program Plan must indicate the secure storage area. Formal training records at the Laboratory must not include Personally Identifiable Information.

3.6.2.a Categories of Required Training Records

There are two types of required training records:

- hard copy training records including machine-printed and handwritten input, and
- electronic training records and documentation that can include user-generated information and digital signatures.

All training records, irrespective of their location or format, must be stored in a manner that minimizes the risk of damage or destruction. Electronic training records must be backed up on a periodic basis. All training records must be maintained in a manner that provides ready access.

3.6.2.a(1) Worker Training and Qualification and/or Certification Records

Individual training records document a worker's completion of training, qualification, and/or certification requirements associated with the worker's work assignments. Individual training records include, but are not limited to the following:

- scored examinations,
- work products that are submitted for grading during a course,
- OJT checklists and performance examinations,
- completed qualification and certification packages,
- management assignment to job(s) or position(s),
- signature for certification of qualifications,
- certificates and licenses indicating completion of courses or programs,
- exceptions to training, education, or experience requirements, and
- extension of qualification/certification.

3.6.2.a(2) Master Course Files

Master course files include all electronic and paper documentation of analysis, design, development, implementation, evaluation, and revision activities relevant to a specific course or training program. The master files also include review and approval documentation. Master files may include supporting material related to the revision process such as examination item analyses, course evaluations, audit reports, and program owner reviews. Master files must contain current lists of qualified instructors for the course.

Analyses documents, task-to-training matrices, and other position-related documents that apply to more than one course may be indexed and filed separately. The master files must contain specific references to the location of these analyses.

All changes to training materials must be approved before the revised materials are used to teach the course. The training developer determines if additional training courses or materials might be affected by the revisions to be made. Development of new course material(s) is appropriate if existing materials cannot be satisfactorily revised to meet the majority of expectations.

Training professionals must verify course material accuracy at least once every three years (more often if documented on the training materials), or when ten authorized hand written changes have occurred since a formal revision.

3.6.2.a(3) Training Rosters

Training rosters include preprinted forms and other attendance sheets that document workers' attendance at training, briefings, seminars, and workshops. Training rosters are personally signed (in ink or electronically) by the workers, and at a minimum, must include Z-numbers as unique identifiers of the persons who attended, date of attendance, the course title, UTrain item number, and lead instructor's signature. UTrain requires workers to have an active Z-number for their completed training to be entered. Training rosters document the participant's successful completion of the course and may include grades and pass/fail status, if applicable.

Training attendance media must not allow workers to enter personally identifiable information, particularly Social Security numbers.

3.6.2.b Training Records Submittal

Instructors must send completed training attendance records to their designated training coordinator or training administrator within two working days of the time the record is generated. When applicable, the training coordinator or training administrator enters training and worker qualification data into UTrain within two working days of receipt of the data.

Instructors who generate training records must take all reasonable precautions to maintain original training records in good condition. If original records are lost, contaminated, or damaged beyond legibility, the generator or training developer may submit a copy of the original marked prominently as "replacement original record."

3.6.2.c Training Records Retention

Training records must be stored and maintained in accordance with P1020-1, *Laboratory Records Management.*

When the volume of training records approaches the storage capacity of the training records repository, the records must be processed for long-term storage in accordance with DOE, Laboratory, and National Archives Records Administration requirements. Records may be uploaded to an electronic searchable database to support long-term capability for research and accountability; however, the original hard copy records must be maintained.

3.6.2.d Training Transcript Request

A worker terminating employment with the Laboratory may request a transcript of his/her training received at the Laboratory. To expedite this process, the worker should request the transcript from his or her training coordinator or training administrator before the worker's last day of employment.

A worker no longer employed at the Laboratory may request a copy of his or her training transcript. The worker should first contact and make the request through his or her former group. If this is not an option, he/she must make the request by providing the following information to the Service Innovation-Institutional Training Services:

- a completed Form 2034, *Former Employee Request for Training Transcripts,*
- one form of identification that includes a photo, date of birth, and signature. Acceptable forms of identification include:
  - officially issued state credential (e.g., drivers' license, identification card), or
  - officially issued federal credential (e.g., military).

The training transcript is sent to the requester only.

Other federal, state, and local government agencies may request a training transcript for a new or potential worker, who was a former Laboratory worker, by completing the procedure above.

Non- federal, -state or -local government agencies or organizations may not receive training transcripts of former Laboratory workers directly from the Laboratory.

4.0 RESPONSIBILITIES

4.1 Service Innovation Division

Responsible for:

- Laboratory-wide policy, procedures, standards, and requirements for training and training services,
- infrastructure (tools, systems, and processes) to support the implementation of training policy, procedures, standards, and requirements,
- oversight of the Laboratory's training program implementation through training evaluation and assessment, and
- training services as required and when requested, in accordance with approved customer service agreements.

4.2 Facility Operations Directors

Responsible for:

- ensuring that workers have appropriate training and qualifications (operations, maintenance, and engineering, environmental, safety, security, waste management, technical support and administrative workers) to support the facility safe operating envelope,
- ensuring subcontractor workers are qualified to perform work,
- developing facility access training,
- identifying positions requiring qualification and/or certification,
- approving the training and qualification programs for assigned workers in the FOD's chain of command, and
- reviewing and concurring with training implementation matrices and/or training program plans.

4.3 Responsible Associate Director

Responsible for:

- ensuring that workers have appropriate training and qualifications (e.g., operations, engineering, environmental, safety, security) to support facility and activities,
- ensuring subcontractor workers are qualified to perform work,
- identifying positions requiring qualification and/or certification,
- approving the training and qualification programs for assigned workers, and
- reviewing and concurring with training implementation matrices and/or training program plans.

4.4 Training Program Owners

The training program owner is the group leader, division leader, program manager, or office leader responsible for ownership of a training program or course. Formerly, this function was referred to as the Major Sponsoring Organization.

Responsible for:

- identifying the training to be conducted;
- identifying and providing resources required to develop and conduct training;
- conducting a training-needs assessment to identify the training needs for the class to be conducted;
- ensuring that organizational workers performing training activities are qualified for assigned duties;
- obtaining approval for Laboratory-wide training taught to workers outside their division;
- developing training program descriptions that accurately reflect the program scope; and
- implementing the requirements of this document within his or her organization(s).

4.5 Responsible Line Managers

Responsible for:

- ensuring that workers have appropriate training and qualifications (operations, maintenance, and engineering, environmental, safety, security, waste management, technical support and administrative workers) to support the facility safe operating envelope,
- reviewing and updating assigned workers' curricula annually after the performance management cycle to ensure that changes to the facility, equipment, and program documentation are incorporated;
- taking corrective action when a worker does not meet the qualification or certification requirements for the work to be performed;
- processing training equivalencies in accordance with this document;
- processing training exceptions in accordance with this document;
- processing exceptions for nuclear facility workers to training, education or experience requirement in accordance with P781-3, *Exceptions to Training, Education, and/or Experience Requirements for Nuclear Facility Workers*;
- providing resources, allowing work time for training and holding workers accountable for meeting training requirements;
- revoking or suspending worker qualification/certification in accordance with this document when worker performance indicates serious safety concerns;
- documenting the selection of group subject matter experts and OJT instructors/evaluators;
- selecting subject matter experts, based on their experience and educational background, to participate in training analyses;
- approving OJT and evaluation materials;
- ensuring that workers are appropriately trained and qualified to perform all their work assignments;

- ensuring that all work is authorized by and performed in accordance with an approved integrated work document, if required;
- documenting that a worker is authorized to perform work; and
- assessing the quality of the OJT program and recommending improvements.

4.6 Work Supervisors/Persons in Charge

Responsible for:

- being knowledgeable of training for the assigned work; and
- verifying that workers are trained, qualified (certified when required), and authorized before performing work.

4.7 Service Innovation Division Leader

Responsible for

- reviewing requests, approving/disapproving new or revised Laboratory-wide training;
- evaluating requests for externally contracted training services;
- implementing Laboratory-wide training programs;
- serving as the training authority for the Laboratory;
- deploying resources based on identified training needs of the Laboratory;
- approving requests for externally-contracted training services;
- interacting with external and internal auditors;
- managing and administrating training at the Laboratory; and
- ensuring that training addresses the identified training needs of the Laboratory.

4.8 Institutional Training Services Group Leaders

Responsible for:

- identifying the Laboratory-wide training to be conducted;
- identifying resources required for Laboratory organizations to conduct that training;
- conducting a training-needs assessment to identify the prioritized facility/job/task/activity-specific training needs;
- ensuring that training workers are qualified and authorized for assigned duties;
- developing training program descriptions that accurately reflect the program scope;
- enforcing the requirements of this document within his or her training organization(s) and for any training activities assigned to the training organization;
- assigning staff to support each training program under his or her control;
- managing training programs assigned directly to his or her group(s) or team(s);
- reviewing and approving training documents developed by the group;
- interacting with external and internal auditors; and
- implementing the requirements of this document.

4.9 Institutional Training Services Team Leaders

Responsible for:

- ensuring that training workers are qualified and authorized for assigned duties;
- reviewing and approving documents developed by their team;
- developing training program descriptions that accurately reflect the program scope; and
- implementing the requirements of this document within their organization.

4.10 Training Specialists

Responsible for:

- applying the systematic approach to training in the analysis, design, development, implementation, and evaluation of training programs;
- working with customers, stakeholders and regulators to ensure that training programs meet customer needs, regulatory drivers, and contractual requirements;
- developing, implementing, and maintaining formal qualification and certification programs;
- developing and maintaining curricula;
- evaluating and assessing training program implementation;
- representing the training program before stakeholders and regulators;
- mentoring coordinators, training specialists, and support staff;
- developing training program policies, procedures, processes, tools, formats, templates, and examples;
- developing technical procedures;
- adhering to policies and programs concerning the Laboratory's training program and other applicable policies and programs; and
- researching, assembling, and/or evaluating information or data regarding industry practices or applicable regulatory changes affecting training program policies or programs; recommending sound, practical solutions to complex issues.

4.11 Instructional Technologists

Responsible for:

- developing, implementing, and maintaining training data-management systems; examples include, but are not limited to, UTrain, training questionnaires, the worker qualification function, and training-validation system;
- developing, tracking, trending, and reporting training metrics;
- developing and managing curricula;
- designing, authoring, developing, and managing web-based training;
- administering training-related programs;
- providing consultation and help-desk services;
- mentoring training coordinators and support staff;

- developing training program policies, procedures, processes, tools, formats, templates, and examples; and
- researching, assembling, and/or evaluating information or data regarding industry practices or applicable regulatory changes affecting training program policies or programs; recommending sound, practical solutions to complex issues.

4.12 Training Coordinators/Training Administrators

Responsible for:

- entering data from completed training and qualification and certification programs into UTrain;
- maintaining documentation required for worker qualification/certification;
- maintaining worker examinations and answer sheets; and
- updating worker records with applicable qualification or certification program provisions (e.g., exceptions, extensions, suspensions, and/or reinstatement of work status) and files with the associated documentation,

4.13 Workers

Responsible for:

- attending and completing all required training; and
- providing necessary information (full legal name, User ID, organization code/name) to properly document training attendance and completion status.

4.14 Institutional Management Review Board

Responsible for:

- authorizing new or revised Laboratory-wide training requirements.

5.0 IMPLEMENTATION

The requirements in this document are effective on the effective date.

This document complements PD781, *Training Program Management*, P781-2, *Qualification and Certification Extensions*, P781-3, *Exceptions to Training, Education, and/or Experience Requirements for Nuclear Facility Workers*, and P781-4, *Training Implementation Matrices*, in establishing the policy, procedures, standards, requirements, and processes for the conduct of training in all Laboratory facilities and programs.

6.0 TRAINING

To request and receive credit for this document, the worker must access it from within UTrain; Course #44576. Assignment of this self-study document is at the discretion of the responsible line manager.

7.0 EXCEPTION OR VARIANCE

To obtain an exception or variance to this document, the following steps must be followed.

- Managers may request an exception or variance from the IA through the RO and RM using Form 3057, *Request for Exception or Variance*.
- At the IA's request, the RO and RM will provide recommendations and supporting information.
- The IA or designee will approve or disapprove the request, and forward the Form 3057 to the Policy Office and copy the requesting Manager.
- The Policy Office will send notification that the exception or variance is effective and ready for implementation after SB Division has completed appropriate reviews.

The Policy Office maintains the official copy of record of the approved correspondence granting the exception or variance.

8.0 DOCUMENTS AND RECORDS

8.1 Office of Record

The Policy Office is the Laboratory Office of Record for this Institutional Document and maintains the administrative record.

9.0 DEFINITIONS AND ACRONYMS

9.1 Definitions

See LANL *Definition of Terms*.

Certifying Authority—A person or group other than the candidates' immediate supervision or the person/group that provided the training assigned by line management, who verifies that all certification requirements have been satisfactorily completed and forwards that information to the organization training manager.

Facility-Specific Training—Training that provides information necessary for workers to conduct activities within the facility within the safe- and secure-operating envelope.

Laboratory-wide Training—Training that applies to workers in organizations other than the training program owner's organization.

On-the-Job Training—Activity-level training that is a systematically designed instructional experience in which hands-on training is conducted and evaluated in the work environment.

Responsible Line Manager—The manager responsible for workers and work products within his or her organization.

Training Program Owner—The group leader, division leader, program manager, or office leader responsible for ownership of a training program or course.

Worker—Anyone working at the Laboratory, including Los Alamos National Security, Limited Liability Company employees, contractors, subcontractors, and may include visitors, students, and affiliates.

Worker Authorization—Enrolling (assigning) workers to an appropriate activity curriculum and ensuring the worker has completed and is current in the required training.

9.2 Acronyms

See LANL *Acronym Master List*.

ASME	American Society of Mechanical Engineers
CFR	Code of Federal Regulations
DOE	Department of Energy
DUSA	Designated Unclassified Subject Areas
FOD	Facility Operations Director
GET	General Employee Training
HDBK	Handbook
IA	Issuing Authority
IMRB	Institutional Management Review Board
ITS	Institutional Training Services (group)
LANL	Los Alamos National Laboratory
NNSA	National Nuclear Security Administration
NQA	Nuclear Quality Assurance
O	Order
OJT	On-the-Job Training
PFITS	Performance Feedback and Improvement Tracking System
RM	Responsible Manager
RO	Responsible Office
SBP	Safety Basis Procedure
STD	Standard
USI	Unreviewed Safety Issue
USQ	Unreviewed Safety Question

10.0 HISTORY

Revision History		
12/22/08	P781-1, Rev. 0	Renumbered document, ISD 781-1, *Conduct of Training Manual*.
01/28/09	P781-1, Rev. 1	This document was updated to include specific procedures on how to identify training requirements, design training so the right target audience receives the right training, develop training, conduct training online and in the classroom, evaluate training, document training, and document and track qualifications and certifications. Reformatted to meet the requirements as set forth in P311-1, *Creating, Revising, and Cancelling Institutional Documents*.

Revision History		
03/12/09	P781-1, Rev. 2	Linked the Training Implementation Plan template Updated Table 1, *Training Classification Determination* Updated required reading Section 3.2.2.d Corrected Section 3.1.5.c to read triennial instead of biennial Corrected Section 3.4 to Certification, in addition to qualification *may* be required
07/22/10	P781-1, Rev. 3	Added Training Management Requirements Handbook Added Institutional Management Review Board (IMRB) process, and protocols for Laboratory-wide training as required by management. Removed the requirement to document formal reviews of employee training plans. Added Form 2150, *OJT Instructor/Evaluator Evaluation Record*. Removed requirement to use Form 2152, *Course Development Agreement*. Updated hyperlinks. Removed references to Analysis, Design, and Development template, and replaced with references to the Systematic Approach to Training Checklist. Updated Section 3.3.3.d, to reflect that all conditional authorizations for workers in training be documented in the Worker Qualification and Authorization System (WQAS). Added that interim qualifications are valid for two years only.
10/28/10	P781-1, Rev. 4	Extended the use of Interim Qualifications through September 30, 2011 in Section 3.3.4. Added paragraphs to Section 5.0 regarding the Unreviewed Safety Question/Unreviewed Safety Issue (USQ/USI) process.
10/25/11	P781-1, Rev. 5	Removed references to the Employee Development System (EDS), Training Validation Management System (TVMS) and WQAS and associated terminology. Added the UTrain Learning Management System, and associated terminology, as the Laboratory's official system of record for training data management. Fixed links, titles, and acronyms.
11/22/11	P781-1, Rev. 6	Clarified who may supervise an individual who has not yet completed the Training Staff Qualification Program (TSQP). Updated Attachment D. *Training Staff Education, Experience, and Qualification Requirements*.

Revision History		
12/13/12	P781-1, Rev. 7	Performed three-year review in accordance with PD311, *Requirements System and Hierarchy*. Section 5.0: Updated to reflect effective date of January 25, 2013 for nuclear, high- and moderate-hazard facilities and accelerators. Updated and clarified Training Classification Determination Level Updated Attachment A, *Training Classification Level Determination Flowchart*. Removed Interim Qualification Requirements Removed and retired Form 2143, *Interim Qualification Form* Removed references to the Virtual Training Center (VTC) Updated hyperlinks
08/08/013	P781-1, Rev. 8	Updated to remove the requirement of paper qualification cards for qualified workers. Issued as a PROVISIONAL document until November 6, 2013
11/06/13	P781-1, Rev. 8	Document became effective and is no longer provisional.
03/04/14	P781-1, Rev. 8	Administrative Change Updated/removed links throughout document. Updated language in Section 5.0 to reflect Unreviewed Safety Question/Unreviewed Safety Issue (USQ/USI) process and implementation dates for affected facilities.
04/08/14	P781-1, Rev. 9	Issued as a PROVISIONAL document until May 23, 2014. Title changed from "*Conduct of Training Manual*" to "*Conduct of Training*." Major Revision including removal of Conditional Authorizations, and extracting detailed instructions and putting them into Functional Series documents. Updated links, titles, and acronyms.
05/23/14	P781-1, Rev. 9	Document became effective and is no longer PROVISIONAL.
12/22/14	P781-1, Rev. 10	Removed requirements for worker authorization in the UTrain Worker Qualification and Authorization tool throughout document. In Section 4.4 and 4.7, deleted reference to customer service agreement. In Section 9.1, deleted term "authorize" and added "term worker authorization." Updated titles, organization names and acronyms.
09/14/16	P781-1, Rev. 10 Admin. Chg. 1	Updated hyperlinks.

Revision History		
11/01/18	P781-1, Rev. 11	Sections 3.2.1 and Section 4.14: Updated to reflect that new or revised Laboratory-wide training must be reviewed by ITS using Form 2254, *FY 2019 Training Requirements Analysis Record for Laboratory-wide Training Course* and, if applicable, approved by the IMRB. Updated organizational names throughout document. Updated Sections 11.0, *References*, and 14.0, *Contact*.

11.0 REFERENCES

Prime Contract:

- DOE O 151.1D, *Comprehensive Emergency Management System*
- DOE O 414.1D, Adm. Chg. 1, *Quality Assurance*
- DOE O 422.1, Adm. Chg. 2, *Conduct of Operations*
- DOE O 426.2, Adm., Chg. 1, *Personnel Selection, Training, Qualification, and Certification Requirements for DOE Nuclear Facilities*
- DOE O 470.4B, Chg. 2, Safeguards and Security Program
- DOE O 243.1B, Chg. 1, *Records Management Program*

11.1 Other References

- *Conduct of Training Manual*
- *Training Management Manual*
- *UTrain Manual*
- Training Program Plan template
- P781-4, *Training Implementation Matrices*
- P781-3, *Exceptions to Training, Education, and/or Experience Requirements for Nuclear Facility Workers*
- Institutional Training Requirements Matrix
- Training Requirement Analysis
- ASME NQA-1-2008 and NQA-1A-2009, *Quality Assurance Requirements for Nuclear Facility Applications*
- Qualification Standard template
- P300, *Integrated Work Management*
- P507, *Student Programs*
- P508, *Postdoctoral Program*
- SD601, *Conduct of Research and Development*
- P850, *Subcontract Technical Representative Procedure*
- P101-12, *ES&H Requirements for Subcontractors*
- DOE HDBK 1078-94, *Training Program Handbook: A Systematic Approach to Training*

- DOE HDBK 1074-95, *Alternative Systematic Approaches to Training*
- Training Staff Qualification Program
- Systematic Approach to Training Checklist
- PD328, *LANL Assessment Program*
- P328-2, *Independent Assessment*
- DOE-STD-1070-94, *Guidelines for Evaluation of Nuclear Facility Training Programs*
- 36 CFR Chapter XII, *National Archives and Records Administration*, Subpart B, *Records Management*
- P1020-1, *Laboratory Records Management*
- SBP112-3, *Unreviewed Safety Question (USQ) Process*
- SBP113-3, *Unreviewed Safety Issue Process*
- PD781, *Training Program Management*
- P781-2, *Qualification and Certification Extensions*
- P311-1, *Creating, Revising, and Cancelling Institutional Documents*
- PD311, *Requirements System and Hierarchy*

12.0 FORMS

Form 2154, *Request a Training Equivalency (nonnuclear)*
Form 2254, *FY 2019 Training Requirements Analysis Record for Laboratory-wide Training Course*
Form 1793, *Job-Demands Evaluation*
Form 2034, *Former Employee Request for Training Transcripts*
Form 3057, *Request for Exception or Variance*

13.0 ATTACHMENTS

There are no attachments associated with this document.

14.0 CONTACT

Service Innovation Division-Institutional Training Services Group

IMPORTANT

If you wish to receive credit for the preceding document you **must** enter the course through *UTrain* **not** the Policy Office website.